State of Alaska FY2008 Governor's Operating Budget

Department of Environmental Conservation

Department of Environmental Conservation

Mission

Protect human health and the environment.

Core Services

- Develop and enforce standards for protection of the environment that allow for sustainable economic growth.
- Provide controls and enforcement for the prevention and abatement of pollution to the environment.
- Provide controls and enforcement to protect citizens from unsafe sanitary practices.

| End Results | Strategies to Achieve Results |
|--|--|
| A: The Environment is Protected. | A1: Establish Protective Standards |
| Target #1: Impacts of new and historical pollution to land and water are reduced. Measure #1: % increase from the prior year of polluted environments remediated or restored for use. | Target #1: Priority programs for environmental protection are up to date by 2008. Measure #1: Revisions to priority programs for environmental protection are % complete (4 yr Strategic Plan). |
| Target #2: Clean Air Measure #2: % of population living in areas in compliance with health based Air Quality Standards (natural events | A2: Contain and Cleanup Pollution in the Environment |
| excluded). | Target #1: 98% of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually. Measure #1: % of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually. |
| | A3: Control Pollution to the Environment |
| | Target #1: Pollution control inspection and certification programs are implemented by FY2007. Measure #1: % of inspection and certification programs implemented by FY2007. |
| | Target #2: Known regulated industry and community facilities operate with authorizations/permits or certifications. Measure #2: % of known regulated industry or community facilities operating with appropriate authorizations/permits or certifications. |
| | A4: Enforce Pollution Controls |
| | Target #1: The percent of total enforcement actions that require civil or criminal enforcement to return the regulated community to compliance is reduced. Measure #1: Change in percent of total enforcement actions that require civil or criminal enforcement. |

| End Results | Strategies to Achieve Results | | | |
|---|--|--|--|--|
| B: Citizens are Protected from Unsafe Sanitary Practices | B1: Establish Protective Standards | | | |
| Target #1: No public illness outbreaks in regulated facilities. Measure #1: Number of regulated facilities with reported public illness outbreaks. | Target #1: Priority programs for safe sanitary practices are up to date by 2008. Measure #1: Revisions to priority programs for safe sanitary practices are % complete (4 yr Strategic Plan). B2: Control Sanitary Practices | | | |
| | <u>Target #1:</u> Safe sanitary practice inspection and certification programs are implemented by FY2007. <u>Measure #1:</u> % of programs for inspection and certification for safe sanitary practices implemented by FY2007. | | | |
| | B3: Enforce Controls for Safe Sanitary Practices | | | |
| | Target #1: The percent of total enforcement actions that require civil or criminal enforcement to return the regulated community to compliance is reduced. Measure #1: Change in percent of total enforcement actions that require civil or criminal enforcement. | | | |

Major Activities to Advance Strategies

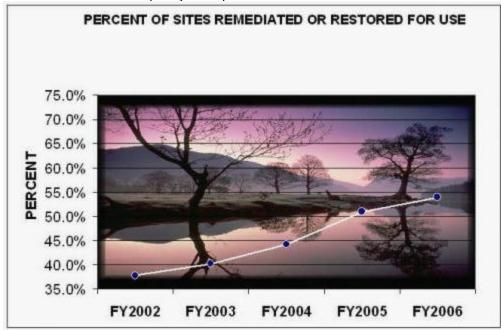
- Develop and implement protective standards.
- Provide statewide support systems and information management.
- Provide assurances of safe sanitary conditions.
- Respond to, contain, and cleanup incidents of pollution to the environment.
- Provide effective and efficient permit and inspection programs.
- Enforcement compliance fairly and consistently statewide.

| FY2008 Resources Allocated to Achieve Results | | | | | |
|---|----------------------|-----|--|--|--|
| FY2008 Department Budget: \$76,721,400 | Personnel: Full time | 537 | | | |
| | Part time | 1 | | | |
| | Total | 538 | | | |
| | | | | | |

Performance Measure Detail

A: Result - The Environment is Protected.

Target #1:Impacts of new and historical pollution to land and water are reduced. **Measure #1:** % increase from the prior year of polluted environments remediated or restored for use.



Analysis of results and challenges: This measure combines Spill Prevention and Response data for recovery of sites contaminated with oil or hazardous substances with that of the Water Division on recovered waterbodies.

Spill Prevention and Response - Contaminated Sites Program

Alaska has many sites that have been contaminated with oil or hazardous substances. Additional sites are discovered almost daily. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use or land sales or transfers.

It is important that historic contaminated sites are found and reported, so that appropriate steps can be taken to protect the public. However, as the data shows, for every site that is cleaned or cleaned to a point that no further action is required, nearly as many contaminated sites are discovered each year, making it a challenge to show progress toward reducing the number of contaminated sites in the state.

The program's goal is to be able to continue remediating sites at a rate that maintains the relative percentage of total sites remediated the previous year. Data shows that in FY2006 there was a 3% increase over the prior year.

Division of Water

Polluted, or "impaired" waterbodies are identified in the biennial "Integrated Report" submitted by the Department to the Environmental Protection Agency. Data for this measure is available every two years when the report is prepared. The Division of Water establishes a target of at least 10 active restoration projects per year. Restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies with funds received from ADEC through Reimbursable Services Agreements, or by Department personnel. During FY2005, 18 restoration projects were ongoing on impaired waters.

Target #2:Clean Air

Measure #2: % of population living in areas in compliance with health based Air Quality Standards (natural events excluded).



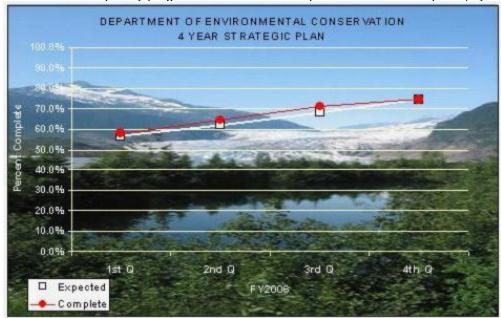
Analysis of results and challenges: Air monitoring is performed to ensure compliance with the National Ambient Air Quality Standards (NAAQS) for the protection of public health. Traditionally monitoring takes place in larger communities or where complaints have been received. Air Quality for the rest of the state is assumed to be good.

The graph listed above demonstrates that there were no violations of the fine particulate standard (PM 2.5) during the first three quarters of FY06 or carbon monoxide (CO) standard during the winter 2005-2006 from human caused activity within the State's customary monitoring network. The 4th quarter data for FY06 will be available December 2006.

In addition to the State monitoring network, the Air Quality division is engaged in an air monitoring project to measure airborne levels of dust (PM 10) pollution as part of a Department of Transportation (DOT) research project evaluating the effectiveness of paving roads in Kotzebue. High airborne dust levels from vehicle traffic on unpaved roads violate the health based standard in Kotzebue and other rural communities. The Department will be working with the affected communities and DOT to develop an effective control strategy for dust in the Region.

A1: Strategy - Establish Protective Standards

Target #1: Priority programs for environmental protection are up to date by 2008. **Measure #1:** Revisions to priority programs for environmental protection are % complete (4 yr Strategic Plan).



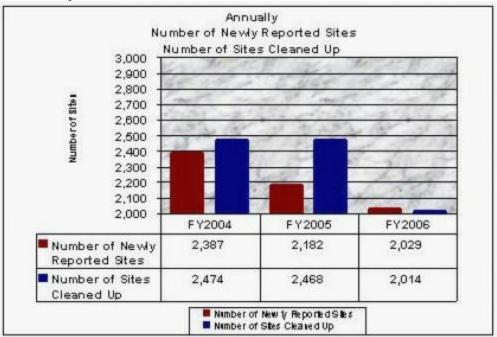
Analysis of results and challenges: DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent, abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. Overall, at 74.5% completion, performance is on track.

A2: Strategy - Contain and Cleanup Pollution in the Environment

Target #1:98% of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.

Measure #1: % of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.



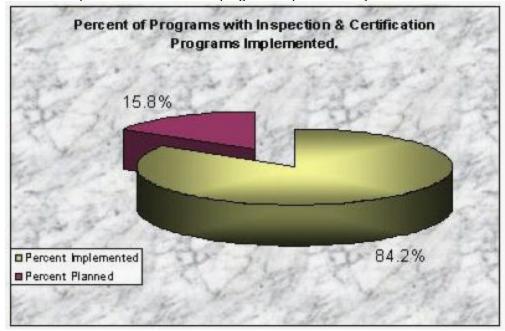
Analysis of results and challenges: There are two types of contaminated sites reported to divisions within the Department of Environmental Conservation each year; new spills of oil and hazardous substances and discovery of sites with historical (old) contamination.

As sites are reported they are either cleaned and closed through the initial response phase or are referred to the Contaminated Sites program for long-term remediation. Historically, more sites are reported each year than can be cleaned up, creating a steady increase in the number of sites. Depending on the number of sites reported in a year, the type or extent of contamination and the stage of completion at the end of a reporting period, the annual percent of sites cleaned up will fluctuate and, as happened in FY2004 and FY2005, can go above 100%.

The program's goal is to annually clean a number of sites that is at least 98% of the number of newly reported sites each year. In FY2006, 99.5% of newly reported sites were cleaned.

A3: Strategy - Control Pollution to the Environment

Target #1: Pollution control inspection and certification programs are implemented by FY2007. **Measure #1:** % of inspection and certification programs implemented by FY2007.

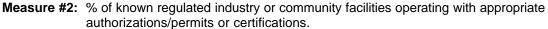


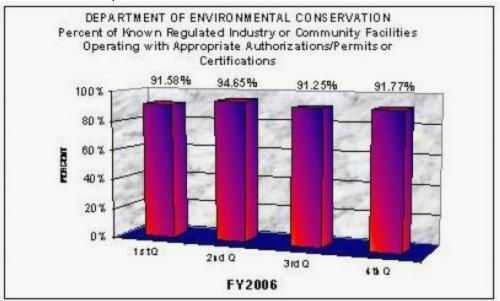
Analysis of results and challenges: DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action.

In order to be sure that protective standards are met and pollution controls followed, inspection and certification programs are established to document compliance.

The measure summarizes department progress against a plan for implementing new inspection and certification programs.

Target #2:Known regulated industry and community facilities operate with authorizations/permits or certifications.





Analysis of results and challenges: In order to ensure protective standards are met and pollution controls followed, DEC authorizes or certifies the operation of industry or community facilities. Please also note Strategy #A3-1.

Division of Air Quality

Our goal is for 100% of regulated sources to operate under the appropriate permit or approval.

DEC controls air pollution to the environment through the following permits: pre-approved limits, owner requested limits, permits by rule, general permits, source-specific permits. State law allows an applicant to operate a source under an operating permit application shield until the Department issues an operating permit. Major source permits are required for air pollution sources covered under Title I and Title V of the federal Clean Air Act. Similar to many other states, Alaska's permit program also requires issuance of minor source permits for sources having the potential to cause unhealthy air quality conditions.

The Department's Air Permits Program is mature with respect to meeting all federal requirements. Although the Department has not kept records on this specific goal before FY 2004, close to 100% of all regulated air permit sources operate under an air permit or application shield. The Air Permits program completed a major reform effort in 2005 to attain a predictable, reliable and rational permitting goal. The reforms were implemented and began to show results in FY2006.

The program continues to achieve its goals through FY2006. As more five-year air permits expire, the Program will continue to renew general operating permits and source-specific permits. For air permits, we anticipate little change in the current success rate.

October 1, 2004 was the effective date for regulations establishing the program's minor source permit program and reforming the existing major source permit program. These regulations changed stationary source categories that require an air permit and changed the types of permits the program issues. The program expects minimal challenges to achieve its stated goals under the new program with resources currently allocated.

Division of Spill Prevention and Response

Regulated facilities and vessel operators including: oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms and tankers, non-crude oil tank vessels and barges, and non-

tank vessels are required to have approved oil spill contingency plans and certificates of financial responsibility in place before they are allowed to operate in Alaska. Contingency plans outline the various steps and procedures that would be followed to allow quick and effective cleanup in the event of an unanticipated oil spill. Certificates of financial responsibility ensure that the party responsible for a spill will be able to pay for cleanup costs, including reimbursement for any State funds spent as a result of the spill. These facilities and vessel operators cannot legally operate without approved contingency plans and certificates of financial responsibility in place, and compliance is maintained at 100%.

Underground petroleum storage tanks are also regulated. These are primarily gas stations, RV parks and other facilities that maintain underground petroleum storage. Federal law requires these facilities to be inspected and tagged every three years or they are unable to accept deliveries. The data for this measure will fluctuate as new underground petroleum storage tanks are opened and existing tanks are closed.

Division of Environmental Health

Municipal landfills that receive over five tons of waste per day (Class I and Class II Landfills) require an authorization from DEC. All facilities required to have permits either have them or are in the process of applying or renewing them.

In the current permitting system, small communities producing less than 5 tons of municipal solid waste per day are required to have a Class III permit. Only 25% of the Class III communities have permitted landfills. The department is changing the structure of the solid waste program to improve the number of authorized Class III landfills.

Location specific data is being developed for the Class III landfills that will allow a community to evaluate if they qualify for the prior authorization landfill permit program. A risk calculator, linked to landfill design criteria and operational parameters that are specific to landfill location, will be used to make the evaluation and qualify for prior authorization of the landfill.

Division of Water

The Wastewater Discharge Permit program issues three kinds of wastewater discharge approvals:

- 1) State individual permits and authorizations under 18 AAC 72
- 2) State permits and plan approvals of on-site disposal (septic systems) under 18 AAC 72
- 3) Certification that EPA-issued NPDES permits meet state water quality standards under 18 AAC 70.

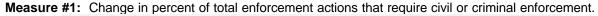
State-issued permits and especially authorizations under state general permits, can meet the 100% measure more easily than certification of NPDES permits. This are quick turnaround, predictable discharges and do not require advanced analysis of the impacts. NPDES permits are for large volume, more complex discharges and state certification can be slowed during permit negotiations and responding to comments received by the public on draft permits.

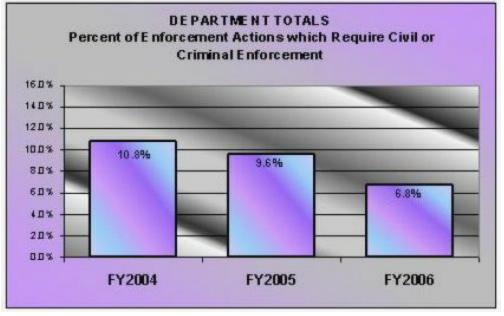
As part of NPDES primacy assumption, some state permits may need to be converted to NPDES permits. DEC and EPA plans to share permit duties as capacity building for primacy. With the transition, the program does not expect to meet its goal of 100% in this fiscal year.

A major tool for tracking and keeping permits current is the new permit database developed in anticipation of NPDES primacy. Achieving the 100% target will be improved with automatic notification of renewals built into the system.

A4: Strategy - Enforce Pollution Controls

Target #1:The percent of total enforcement actions that require civil or criminal enforcement to return the regulated community to compliance is reduced.





Analysis of results and challenges: The Alaska Department of Environmental Conservation has primary responsibility for the enforcement of laws governing the protection of water, land and air quality. Normally these laws are enforced by the regulatory staff through administrative or civil remedies.

Protecting the environment requires that we establish protective standards and enforce those standards. The effectiveness of our enforcement programs can be measured by looking at voluntary compliance of the regulated community – compliance before legal action becomes necessary.

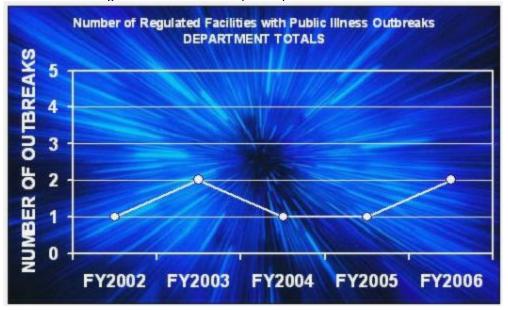
However, when polluting or environmentally harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered. In addition to threatening the quality of Alaska's environment, nearly all environmental crimes involve a risk to public health, now or in the future. Environmental crimes include: the illegal discharge of pollutants into Alaska's water sources; the improper disposal of solid or hazardous waste; and the illegal discharge of pollutants into the atmosphere.

In most instances DEC programs warn and always investigate violators prior to taking legal action. These actions are tracked in the environmental crimes database.

(For further information on administrative penalties or to view the FY2005 enforcement report – visit http://www.state.ak.us/dec/das/info_services/pdfs/enfreport.pdf)

B: Result - Citizens are Protected from Unsafe Sanitary Practices

Target #1:No public illness outbreaks in regulated facilities. **Measure #1:** Number of regulated facilities with reported public illness outbreaks.



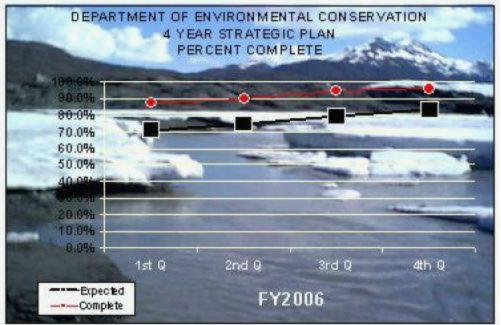
Analysis of results and challenges: The Epidemiology section of Health and Social Services (HSS) conducts investigations of outbreaks of human illness and death and, with the help of DEC investigators, determines the source of the outbreak. On a routine basis, Environmental Health Officers investigate cases of suspected food borne illness in coordination with the Department of Health and Social Services. Investigation requires Food Safety staff to take food case histories and conduct risk focused inspections of regulated food establishments to determine if food preparation, handling, source, or employee health may be the causative or contributing factors for the illness. The measure does not include illness determined through investigation to be a result of norovirus infections associated with food and sanitation practices, or food borne illness which results from consumer mishandling of retail food.

Data displayed here reflects the number of food facilities and drinking water systems, regulated by DEC, that were determined to be the source of an outbreak during the reporting period.

While we can track those outbreaks reported to HSS, many incidents of illness related to food or drinking water may never actually get reported. In milder cases, symptoms may be mistaken for ordinary flu or an upset stomach and be overlooked by doctors or individuals.

B1: Strategy - Establish Protective Standards

Target #1: Priority programs for safe sanitary practices are up to date by 2008. **Measure #1:** Revisions to priority programs for safe sanitary practices are % complete (4 yr Strategic Plan).

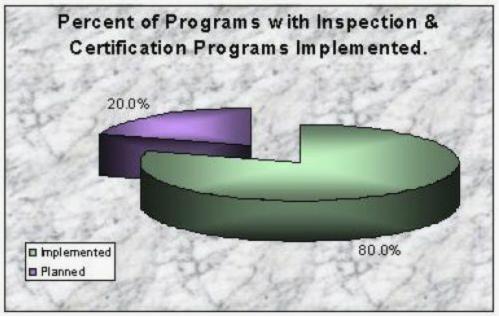


Analysis of results and challenges: DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health will be protected. We do this by influencing external entities to utilize safe sanitary practices through a comprehensive protection program. We don't prevent unsafe sanitary practices – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. Overall, at 96.0% completion, performance exceeds expected.

B2: Strategy - Control Sanitary Practices

Target #1:Safe sanitary practice inspection and certification programs are implemented by FY2007. **Measure #1:** % of programs for inspection and certification for safe sanitary practices implemented by FY2007.



Analysis of results and challenges: DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health will be protected. We do this by influencing external entities to utilize safe sanitary practices through a comprehensive protection program. We don't prevent unsafe sanitary practices – we influence others to take preventative action and establish inspection and certification programs by which to measure success.

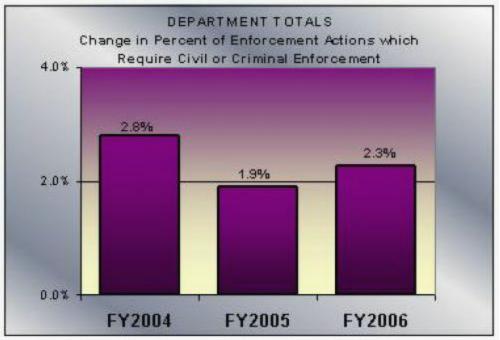
These programs are established to allow us to document compliance.

The measure summarizes department progress with development and implementation of planned programs. It is expected that all programs will be complete by the end of FY2007.

B3: Strategy - Enforce Controls for Safe Sanitary Practices

Target #1:The percent of total enforcement actions that require civil or criminal enforcement to return the regulated community to compliance is reduced.

Measure #1: Change in percent of total enforcement actions that require civil or criminal enforcement.



Analysis of results and challenges: The Alaska Department of Environmental Conservation has primary responsibility for the enforcement of laws governing the protection of citizens from unsafe sanitary practices. Normally these laws are enforced by the regulatory staff through administrative or civil remedies.

Protecting public health requires that we establish protective standards and enforce those standards. The effectiveness of our enforcement programs can be measured by looking at voluntary compliance of the regulated community – compliance before legal action becomes necessary.

However, when harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered. In addition to threatening the quality of Alaska's environment, nearly all environmental crimes involve a risk to public health, now or in the future. Environmental crimes include: the illegal discharge of pollutants into Alaska's water sources; the improper disposal of solid or hazardous waste; and the illegal discharge of pollutants into the atmosphere.

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Key Department Challenges

During FY2008 the department faces significant challenges in each of its divisions as follows:

Administration

- Clearly communicating to the public and affected stakeholders what services can realistically be expected from the department's human and fiscal resources consistent with its statutory requirements.
- Making the department's large volume of data easily accessible for stakeholders within and outside of state government.

Hiring and retaining competent staff continues to be a challenge. Due to higher salaries and benefits offered by the
private sector, the department continues to loose good employees; impacting our ability to manage programs
successfully.

Environmental Health

- Assuming and maintaining control over the quality of Alaska's water.
- Maintaining and operating the new Environmental Health Laboratory to provide accurate, timely, and efficient services to Alaska's growing Alaskan seafood industries and for animal disease surveillance.
- Implementing the new Active Managerial Control (AMC), food safety program to provide equal protection to all Alaskans statewide.
- Testing and informing consumers about the safety of Alaska's wild fish resources.
- Improving Alaska's capacity to identify foreign animal diseases or other bioterrorism agents and controlling them before public health is jeopardized.
- Developing an effective method for safe Solid Waste disposal in Alaska's isolated rural communities so that the environment and public health are protected.

Air Quality

- Converting rural Alaskan communities to clean burning diesel fuel to protect air quality and human health.
- Developing visibility protection plans for Denali Park and other Class I protection areas that distinguish locally caused, and potentially controllable, haze pollution from natural sources and haze from abroad.
- Prepare Alaska for a national climate change law that leverages Alaska's business opportunities as a carbon sequestering state in forestry, oil and gas and other sectors.
- Provide timely and accurate pollution advisories to communities affected by wildfire smoke to enable citizens to take
 protective actions that will avoid respiratory or cardiac incidents.
- Continue the improvement of on-line permitting services including electronic submittal of all routine environmental monitoring reports by permittees.

Water

- Serve as a single point of contact for federal agencies, universities, and other organizations regarding the department's research needs and priorities.
- Assuming greater responsibility from the federal government for control of Alaska's water quality.
- Controlling non-point sources of water pollution in collaboration with local governments.
- Establishing protective water quality standards that reflect natural conditions and do not rely on unnecessary prohibitions.
- Making the long-term sustainability of facilities and service a condition for providing grants and loans to communities for water and sewer projects.

Spill Prevention and Response

- Reviewing and updating the spill prevention requirements for the oil and gas industry.
- Reducing the occurrence of oil and hazardous substance spills releases from unregulated sources.
- Implementing a risk based approach for cleanup of contaminated sites to protect public health and the environment, increase the number of cleanups and promote the economic re-use of contaminated properties.
- Sustaining the states' core spill prevention, preparedness and response capability in the face of declining revenues. Revenues to the Prevention Account of the Oil and Hazardous Substance Release Prevention and Response Fund come from a combination of cost recovery, fines, penalties and settlements, investment income, and a 4-cent surcharge against each barrel of crude oil produced in the state. In recent years revenues have been declining due to a number of factors, not the least of which is the reduction in crude oil. Revenues have reached a point where they can no longer sustain the division's core spill prevention, preparedness and response programs beyond FY2008.

Significant Changes in Results to be Delivered in FY2008

DEC OIL AND GAS INTEGRITY MANAGEMENT INITIATIVE

Alaska is experiencing a significant increase in issues concerning integrity management of aging oil production and transportation infrastructure within the state. The number of spills from oil exploration and production facilities is increasing annually. As the average age of Alaska's pipelines and production facilities increases, maintenance issues and oversight of system integrity becomes vitally important to ensure continued safe operation and to reduce the number and severity of oil spills. Aggressive oversight is also important to ensure that revenues from oil production not be

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Along with aging oil transportation infrastructure issues, oil exploration in Alaska is currently on an upswing, necessitating additional resources to accommodate additional facilities and new oilfield operators unfamiliar with state pollution control requirements.

DEC is not keeping pace with the current level of oil and gas activities in Alaska and cannot keep up with the expected increased level of oil and gas integrity issues or exploration and development activities.

- Oil and gas facilities are not inspected for compliance with state environmental laws as thoroughly or as often as required to provide adequate oversight.
- The aging oil production infrastructure requires additional oversight to maintain compliance with state requirements.
- The cumulative impact of oil and gas waste discharges to the air, from the North Slope industrial operations, have not been monitored or measured to assess the aggregate potential harm to land, water, vegetation, wildlife and humans.
- As new oilfield operators enter the state, significant compliance assistance is needed to make sure that state requirements are met.
- There is little communication or collaboration with industry and concerned stakeholders on the planning and design of projects to minimize environmental problems and take advantage of opportunities to promote environmentally responsible development.
- Much of the work carried out on the North Slope is made by contractors whose day to day activities are often not monitored or given departmental oversight due to the current lack of a full-time field presence of staff.

The oil and gas integrity management initiative funds new and enhanced services in the Divisions of Water, Air Quality, Spill Prevention and Response, and Environmental Health. Services fall in two areas 1) inspection, monitoring and compliance and 2) environmental planning, design and consultation.

Inspection, Monitoring and Compliance

DEC will:

ENVIRONMENTAL HEALTH

- Conduct inspections of solid waste units, including temporary storage facilities for drilling wastes and provide compliance assistance to North Slope facilities.
- Increase inspections for temporary storage, reserve pits, and grind-and-inject facilities.

WATER QUALITY

- Conduct water inspections and provide compliance assistance to North Slope facilities.
- Increase inspection rates for high priority wastewater discharges from 50% to 100%.
- Increase inspections for pad and road construction projects from 0% to 50% (approximately 50 projects).
- Conduct independent verification of effluent quality and verification of facility self-reporting on discharge monitoring reports.
- Evaluate ambient water quality through sampling and analyses.

SPILL PREVENTION AND RESPONSE

- Provide a continuous field presence to increase general oversight of all oil field operators including the numerous contractors currently employed by the oil companies.
- Increase the number of drills and exercises conducted to test and determine compliance with oil discharge prevention and contingency plans.
- Increase the number of on-site inspections conducted to determine compliance with discharge prevention.
- Increase inspections of regulated oil and gas facilities to ensure compliance with spill prevention requirements.
- Verify equipment and resources are available and ready in accordance with oil spill contingency plans.

- Increase technical oversight of operations and maintenance practices designed to prevent oil spills and unanticipated shutdowns.
- Investigate complaints on lack of proper oil and hazardous substance discharge prevention, preparedness, and
- Increase on-site monitoring and oversight of cleanups and field responses to significant spills.
- Utilize third-party inspectors to assess leak detection and corrosion monitoring practices.
- Utilize third-party subject matter experts to assess and aid in correction of aging infrastructure-related problems.
- Conduct engineering review of pipeline corrosion management planning.
- Implement new regulations for oil flow lines.

Environmental Planning, Design and Consultation

DEC will:

- Work proactively to identify potential environmental and public health issues early in the lease sale planning process when changes can be most effective in preventing future pollution problems.
- Review plans and statements for lease sale plans to identify and avoid or mitigate potential air, land and water quality effects.
- Identify and resolve potential environmental and public health issues early when changes to project designs can be most effective in preventing future pollution problems.
- Review and prepare a single coordinated and consolidated response.
- Develop and implement assessments of the cumulative effects of oil and gas activities on Alaska's environment.
- Increase its participation with stakeholder workgroups to resolve.

ENVIRONMENTAL HEALTH

Complete review and evaluation of plans for solid waste storage facilities. Plans include engineering plans and specifications, operations plans, and closure plans, including monitoring requirements.

WATER QUALITY

Evaluate best available technologies to reduce waste quantity and toxicity.

SPILL PREVENTION AND RESPONSE

- Develop standardized technical manuals, scenario guidelines and assumptions.
- Provide technical assistance for contingency plan review.
- Provide full time, on-site technical assistance to industry and consultants.
- Develop educational materials and conduct stakeholder outreach.
- Establish minimum design and construction performance standards for oil spill prevention.
- Review oil and gas leases, plans of operation and EIS reviews to insure adequate measures are in place for spill prevention and response.

The oil and gas integrity management initiative funds new and enhanced services in the Prevention and Emergency Response component as follows:

- Day-to-day presence of DEC personnel on the North Slope to ensure operations are conducted in a safe and environmentally sound manner.
- Increase in inspections and monitoring of the aging infrastructure.
- Increase inspections of spill response equipment.
- Increased monitoring of spill responses and cleanups.
- Increased monitoring of industry training and spill drills.
- Provides for immediate technical assistance.

The oil and gas integrity management initiative funds new and enhanced services in the Industry Preparedness and **Pipeline Operations** component as follows:

- Implement engineering evaluation and review of corrosion management programs for 1,500 miles of flowlines on the North Slope and Cook Inlet oil and gas fields which are subject to new state regulations.
- Implement and increase technical field inspections and compliance monitoring of new oil spill prevention requirements.
- Increase verification of response capability for exploration, production, and refinery facilities by 15%.
- Increase engineering support for design review of new flowline installations and leak detection systems for crude

oil transmission pipelines.

- Complete specialized training requiring certification for inspection of pipelines and bulk fuel storage facilities.
- Conduct independent third party audits of corrosion management and other spill prevention requirements for regulated facilities to ensure integrity of oil and gas operations and protection of the environment.

The oil and gas integrity management initiative funds new and enhanced services in the **Solid Waste** component as follows:

- Increased inspections of solid waste facilities on the North Slope.
- Increased review and evaluation of plans for solid waste storage and disposal facilities.

As a result of increased maintenance and testing of the pipeline system, there will be an increase in the volume of solid waste (sludge from pipelines) requiring temporary storage and disposal, likely through grind-and-injection facilities.

The oil and gas integrity management initiative funds new and enhanced services in the **Water Quality** component as follows:

- Water inspections and compliance assistance to North Slope facilities.
- Increased rate of inspections for high priority wastewater discharges from 50% to 100%.
- Increase inspections for pad and road construction projects from 0% to 50% (approximately 50 projects).
- Independent verification of effluent quality and verification of facility self-reporting on discharge monitoring reports.
- Evaluation of ambient water quality through sampling and analyses.
- Evaluation of best available technologies to reduce waste quantity and toxicity.

The department is proposing various changes to component budgets. Some of these changes are a result of continued efforts to obtain efficiencies or realign resources and do not impact overall results delivered. Those areas where there are significant changes in results to be noted are as follows:

ENVIRONMENTAL HEALTH

Environmental Health protects public health by ensuring safe drinking water, food, and sanitary practices. The division focuses on clear standards for regulated entities, applying the standards consistently statewide, providing compliance support and enforcing the standards when necessary.

Drinking Water Primacy

The Alaska Drinking Water Program is an EPA delegated primacy program, receiving a federal grant as the primary source of funding. For the past several years, grant funding has not kept pace with increasing costs required to implement the program. The program has fallen behind in adopting and implementing new federal rules. When a program falls behind, the EPA retains partial primacy and enforces the new rules until the State can catch up. Traditionally, EPA enforcement is swift, strict and does not include technical assistance - making it difficult for public drinking water systems to attain and maintain compliance. If the State does not catch up, primacy may be lost altogether.

Funding for additional staff and resources is needed to keep pace with new requirements, adopting and implementing new rules in a timely manner. Additional federal funds requiring a 50% match are available.

The 2007 legislature proposed a three year plan for obtaining and implementing primacy and funded the first year to ensure that Alaska's public water systems will be regulated by the state Drinking Water Program not the EPA. DEC is seeking funding for the second year of that three year plan.

In addition to providing needed technical support, State primacy allows:

- 1. Issuance of monitoring waivers to reduce the cost of routine monitoring. EPA does not.
- 2. Issuance of variances or exemptions that allow public drinking water systems to achieve compliance over time while still providing public health protection. EPA does not.
- 3. Issuance of construction and operation approvals that reflect local knowledge, experience and an understanding of arctic engineering principles. Experience EPA does not have.

DIVISION OF WATER

The Division of Water protects the environment and public health by ensuring the quality of Alaska's waters and provides funding and technical assistance to communities for sustainable development of infrastructure for water, wastewater and sewerage. The division focuses on clear standards for regulated entities, applying the standards consistently statewide, providing compliance support and enforcing the standards when necessary.

Cruise Ship Ballot Initiative

The initiative passed in August, 2006, requires DEC to develop and maintain a new permit program for Large Commercial Passenger Vessels ("cruise ships") to replace the current program for regulating these vessels. It would also require DEC to place marine engineers ("Ocean Rangers") licensed by the Coast Guard on the cruise ships to monitor compliance with State and Federal environmental laws. Two marine engineers working alternating twelve-hour shifts would be placed on each cruise ship operating in Alaska waters.

The greatest challenge for implementation of the ballot measure is hiring experienced, licensed Ocean Rangers. These are likely to be specialized marine engineers in short supply in Alaska. Contracting them, initially phasing in both the workers and their on-board shifts, is likely. Revised regulations, permits, and new databases/on-line permit applications must be developed.

Effective 12/2006, the initiative requires DEC to set up and run the Ocean Ranger program. The initiative also contains language permitting civilian suits if the program is not implemented. Funding, provided through a \$4/berth head tax (estimated \$3.6 million to be deposited to the Commercial Passenger Vessel Fund), is approx \$2.0 million less than the estimated cost of the program (\$5.6 million). The CPVF does not contain resources to cover the shortage but, other fees imposed by the ballot initiative have the potential to generate and estimated \$18.0 million or more in excess revenues to the State. DEC is seeking the additional \$2.0 million needed to implement the ballot initiative.

DIVISION OF AIR QUALITY

The Division of Air Quality protects the environment and public health by protecting air quality. The division focuses on clear standards for regulated entities, applying the standards consistently statewide, providing compliance support and enforcing the standards when necessary.

Air permit reform, begun in 2003 under HB 160, will conclude with implementation of fee regulations in January 2007. Additional receipts from the new fee structure are requested in this budget and will provide enhanced program services as follows:

- Increase total Title V (Operating Permit) work actions (permits, complaint investigations and compliance actions)
 by approximately 34% from an average of 360 actions to approximately 480 actions per year;
- Increase the total Title I (Construction Permit) actions by approximately 28% from an average of 36 to approximately 46 per year; and
- Implement data automation and a quality management system to improve standard permit forms and review procedures.

Major Department Accomplishments in 2006

The department was successful in working with interested stakeholder work groups and the public on the following major state policy issues:

Better Permitting

The department continued its commitment to strengthen water and air permitting. Permits are essential to environmentally responsible development. They provide important information about impacts on the environment. A permit provides all stakeholders the opportunity to learn about a proposed project, comment, and receive a substantive response from us before final decisions are made.

Air Permit reform and streamlining is now structurally complete – all statutory and regulatory changes are finalized. Streamlined services with shorter, predictable permit delivery are being accomplished. However, additional improvements are still expected in FY2008 as performance audits and quality management tools provide important feedback on how well the reform is accomplishing each of its intended goals.

In FY2003, the Commissioner approved a complete overhaul of the regulations that we use to protect Alaska's water. We began with raindrops and followed water to the ocean to identify gaps in our present regulations. This work was long

overdue and allowed us to establish a four year strategic plan for reviewing standards, updating regulations and program re-design. Water programs across the department were evaluated and reorganized.

In FY2005, new legislation was passed directing DEC to seek primacy for the National Pollutant Discharge Elimination System (NPDES) wastewater permitting program currently managed by EPA in Seattle. NPDES program development has been initiated and beginning in FY2008, permitting, compliance and enforcement will be done by Alaskans who are knowledgeable about Alaskan conditions. DEC is also developing regulations: 1) that provide for department automatic authorization, or "permits by rule", for lower risk wastewater discharges which meet specified eligibility, minimum standards and practices, notification, and fee requirements; 2) that improve water quality standards and ensure they reflect current science and legislative direction; and 3) that integrate the department's permitting of projects with multiple waste streams, such as mines.

In other areas staff:

- Revised the department's water quality standards for mixing zones, residues, and natural conditions.
- Revised the low-interest municipal loan program to allow communities to borrow for projects that address nonpoint sources of water pollution such as storm water run-off, landfill leachate and harbor wastes. Eight communities have applied under the new guidelines, primarily to protect groundwater.
- Updated the village safe water requirements to reflect expectations for sustainability of sewer and water facilities.
- Collected important data of Alaska's coastline through the Environmental Monitoring and Assessment Program to assess the health of our waterways.

Improved Oil Spill Safety and Economic Redevelopment of Contaminated Sites

Legislation introduced by the Governor to increase on-the-water spill drills, equipment testing and inspections has resulted in a 30% reduction in spills from regulated facilities. This significant accomplishment is the result of shifting from paperwork to practice through more practical development of reliable response skills for both government and industry. The benefit has also shown in the very successful response to a major oil spill in the Aleutians caused by the Selendang Ayu. The response implementation of the states' zero tolerance policy for protecting Alaska's wild salmon, pollock, and crab resulted in record harvests, no contamination of seafood product and no depression of market prices as a result of the spill. The combined value of these fisheries was over \$600 million.

Economic redevelopment of contaminated sites through an innovative risk based approach for cleanup has resulted in the reuse of contaminated properties in Fairbanks for construction of Wal-Mart, Home Depot and Fred Meyer stores. Other reuse successes include the revitalization of a seafood processing facility in southwest Alaska and redevelopment of the closed pulp mill sites in Sitka and Ketchikan.

Effective Food Safety Statewide

In FY2003, the Commissioner initiated a complete redesign of our food safety program. Our previous approach depended heavily on regular site inspections and was virtually impossible to deliver consistently across our large and roadless state. Our new approach follows NASA's successful program developed for the manned spaceflight program. It relies on operator certification, restaurant specific risk management and rigorous enforcement by DEC. With passage of the necessary legislation, this new program provides equal protection from Metlakatla to Barrow. It holds owners and operators responsible for knowing how food becomes contaminated and assures that standard operating procedures protect their customers. We are moving from the spot inspection of the past to mandatory every-day management systems. We plan to implement food safety regulations in FY2007.

Better Understanding of Public Health Threats

As a result of human health studies, EPA was requiring ultra low sulfur fuel for diesel trucks and buses by 2007. While there are few trucks and buses in rural Alaska, every community depends on diesel generators for electricity. National initiatives will not help us decide the safest course for Alaskans. During FY2004, we developed and submitted a plan to the EPA for the gradual implementation of ultra low sulfur diesel fuel for use in trucks and buses in rural Alaska. The recommendation provides flexibility for rural communities to bring in the fuel as they need it, within a 2010 deadline for use of ultra low sulfur diesel in all diesel vehicles. The plan provides adequate time for DEC to assess rural health risks from diesel fuel use as necessary to support an infrastructure and fuel choice decision before 2010.

Funds were also allocated to continue fish tissue sampling to measure mercury in Alaskan species. Both the EPA and the FDA have issued repeated warnings about exposure to mercury in fish. We are conducting this study to provide Alaska specific information about the quality of our subsistence, sport caught and commercially harvested stocks. The average consumption of subsistence caught fish in Alaska ranges from 10 to 20 times more than the consumption levels used by EPA. The commercial catch is important too. Alaska's 5 billion pound harvest represents over 50% of the total US commercial catch.

New Environmental Health Laboratory

After 35 years in a renovated grocery store, the State built a laboratory with sufficient capacity to safely test food grown and harvested in Alaska, and monitor animals for transmittable diseases. The new facility was recently approved by the U.S. Department of Agriculture to analyze birds for Avian Influenza. It is the only laboratory in Alaska, one of 40 nationwide, certified to conduct this testing. In the past, Alaska was unable to test for many animal diseases of concern. We now have a facility that is capable to do this important work locally.

Prioritization of Agency Programs

(Statutory Reference AS 37.07.050(a)(13))

Each division director was instructed to prioritize his or her program and submit the results to the Commissioner's Office. The Commissioner formed a group of senior management staff to review the divisions' priorities and convert them into departmental priorities. Program priorities were listed using the department's performance results for protecting the environment and protecting Alaskans from unsafe sanitary practices as the primary ranking criteria.

- 1. Commissioner's Office
- Finance/Budget/Procurement
- 3. Air Permitting Program
- 4. Network Services
- 5. Air Non-Point Mobile Sources and Monitoring Program 16. Pesticides
- 6. Drinking Water Safety Program
- 7. Wastewater Permitting & Compliance Program
- 8. Food Safety and Sanitation
- 9. Water Quality Standards and Monitoring Program
- 10. Non-Point Source Pollution Permitting and Protection Program
- 11. Industry Preparedness

- 12. Office of the State Veterinarian
- 13. Emergency Response
- 14. General Laboratory Services
- 15. Contaminated Sites
- 17. Solid Waste
- 18. Operator Certification Program
- 19. Environmental Crimes
- 20. Remote Maintenance Worker Program
- 21. Municipal Grants and Loans Program
- 22. Village Safe Water Program

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| Department Budget Summary by RDU | | | | | | | | | | | | |
|---|---|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|
| | FY2006 Actuals FY2007 Management Plan FY2008 Governor | | | | | | | | | | | |
| | General Funds | Federal Funds | Other Funds | Total Funds | General Funds | Federal Funds | Other Funds | Total Funds | General Funds | Federal Funds | Other Funds | Total Funds |
| Formula Expenditures None. | | | | | | | | | | | | |
| Non-Formula Expenditures | | | | | | | | | | | | |
| Administration DEC Bldgs Maint & Operations | 2,158.7 340.9 | 1,542.8 0.0 | 5,060.4 44.6 | 8,761.9 385.5 | 2,346.6 564.1 | 1,614.0 0.0 | 2,722.5 47.1 | 6,683.1 611.2 | 2,544.6 569.6 | 1,792.1 0.0 | 3,251.8 52.6 | 7,588.5 622.2 |
| Environmental Health | 4,704.1 | 3,762.9 | 2,504.5 | 10,971.5 | 5,498.1 | 5,234.4 | 2,536.4 | 13,268.9 | 6,810.8 | 5,554.7 | 3,060.1 | 15,425.6 |
| Air Quality Spill Prevention and Response | 1,479.4 0.0 | 1,223.2 2,712.0 | 3,125.1 11,407.2 | 5,827.7 14,119.2 | 1,562.3 0.0 | 1,678.5 3,404.2 | 4,622.8 12,357.3 | 7,863.6 15,761.5 | 1,861.6 0.0 | 1,678.5 3,752.3 | 6,141.0 15,276.9 | 9,681.1 19,029.2 |
| Water Totals | 5,578.4 14.261.5 | 5,617.6 14.858.5 | 2,875.6 25.017.4 | 14,071.6 54.137.4 | 6,474.0 16.445.1 | 7,078.0 19.009.1 | 3,758.1 26.044.2 | 17,310.1 61.498.4 | 9,141.9 20.928.5 | 7,387.5 20.165.1 | 7,845.4 35.627.8 | 24,374.8 76.721.4 |

| Funding Source Summary | | | | | | | |
|--|----------------|------------------------------|-----------------|--|--|--|--|
| Funding Sources | FY2006 Actuals | FY2007 Management Plan | FY2008 Governor | | | | |
| 1002 Federal Receipts | 14,858.5 | 19,009.1 | 20,165.1 | | | | |
| 1003 General Fund Match | 2,700.7 | 3,123.4 | 3,793.6 | | | | |
| 1004 General Fund Receipts | 10,244.1 | 11,816.0 | 15,578.6 | | | | |
| 1005 General Fund/Program Receipts | 1,316.7 | 1,505.7 | 1,556.3 | | | | |
| 1007 Inter-Agency Receipts | 3,918.4 | 1,320.7 | 3,705.8 | | | | |
| 1018 Exxon Valdez Oil Spill Settlement | 28.9 | 48.0 | 51.9 | | | | |
| 1052 Oil/Hazardous Response Fund | 12,813.6 | 13,402.4 | 14,814.9 | | | | |
| 1061 Capital Improvement Project Receipts | 2,217.2 | 3,479.0 | 3,804.4 | | | | |
| 1075 Alaska Clean Water Loan Fund | 283.0 | 55.5 | 61.6 | | | | |
| 1093 Clean Air Protection Fund | 2,082.8 | 3,045.1 | 4,340.5 | | | | |
| 1100 Alaska Drinking Water Fund | 316.7 | | | | | | |
| 1108 Statutory Designated Program Receipts | 2.8 | 225.1 | 225.5 | | | | |
| 1156 Receipt Supported Services | 2,710.5 | 3,458.3 | 3,974.1 | | | | |
| 1166 Commercial Passenger Vessel Environmental | 643.5 | 1,010.1 | 4,649.1 | | | | |
| Compliance Fund | | | | | | | |
| Totals | 54,137.4 | 61,498.4 | 76,721.4 | | | | |

| Po | esition Summary | |
|---|------------------------------|-----------------|
| Funding Sources | FY2007 Management Plan | FY2008 Governor |
| Permanent Full Time Permanent Part Time Non Permanent | 511 1 4 | 537 1 4 |
| Totals | 516 | 542 |

| FY2008 Capital Budget Request | | | | | | |
|--|------------------|------------------|------------------|----------------|----------------|--|
| Project Title | | General Funds | Federal Funds | Other Funds | Total Funds | |
| Water and Wastewater Infrastructure Projects | | 15,235,999 | 55,708,001 | 500,000 | 71,444,000 | |
| | Department Total | 15,235,999 | 55,708,001 | 500,000 | 71,444,000 | |

This is an appropriation level summary only. For allocations and the full project details see the capital budget.

| Summary of Department Budget Changes by RDU From FY2007 Management Plan to FY2008 Governor | | | | | | | | |
|--|---------------|---------------|-------------|--------------------|--|--|--|--|
| | | | | shown in thousands | | | | |
| | General Funds | Federal Funds | Other Funds | <u>Total Funds</u> | | | | |
| FY2007 Management Plan | 16,445.1 | 19,009.1 | 26,044.2 | 61,498.4 | | | | |
| Adjustments which will continue | | | | | | | | |
| current level of service: | 00.4 | 0.5 | 40.4 | 20.5 | | | | |
| -Administration | -23.1 | 0.5 | 49.1 | 26.5 | | | | |
| -DEC Bldgs Maint & Operations | -61.2 | 0.0 | 0.0 | -61.2 | | | | |
| -Environmental Health | 449.8 | -494.3 | 95.2 | 50.7 | | | | |
| -Air Quality | 129.6 | -129.4 | 0.0 | 0.2 | | | | |
| -Spill Prevention and Response | 0.0 | 0.0 | -99.4 | -99.4 | | | | |
| -Water | 92.5 | -92.4 | 0.2 | 0.3 | | | | |
| Proposed budget decreases: | | | | | | | | |
| -Environmental Health | -67.5 | 0.0 | -1.4 | -68.9 | | | | |
| Proposed budget increases: | | | | | | | | |
| -Administration | 221.1 | 177.6 | 480.2 | 878.9 | | | | |
| -DEC Bldgs Maint & Operations | 66.7 | 0.0 | 5.5 | 72.2 | | | | |
| -Environmental Health | 930.4 | 814.6 | 429.9 | 2,174.9 | | | | |
| -Air Quality | 169.7 | 129.4 | 1,518.2 | 1,817.3 | | | | |
| -Spill Prevention and Response | 0.0 | 348.1 | 3,019.0 | 3,367.1 | | | | |
| -Water | 2,575.4 | 401.9 | 4,087.1 | 7,064.4 | | | | |
| FY2008 Governor | 20,928.5 | 20,165.1 | 35,627.8 | 76,721.4 | | | | |